

Some oriental Aphididae (Hemiptera), II.

By Ryoichi Takahashi, Taihoku, Formosa.

(With 2 Figures.)

Parachaitophorus n. g.

(Wingless viviparous female.) Body oval, with many long stout dorsal bristles, each of which arises from a shallow conical tubercle. Head short, not fused with the pronotum, with no median suture. Front not produced anteriorly. Frontal tubercles absent. Eyes small, not or slightly protruding, with many facets; ocular tubercles distinct. Antennae much shorter than the body, 6-segmented, lacking secondary sensoria; distal part of the last segment longer than the base. Cornicles short, conical, imbricated, with a flange at the apex. Anal plate bilobed. Cauda elongate, rounded at the apex, constricted. Legs with long bristles, without spinules on the tibiae; trochanters distinct from the femora.

Genotype. — *Patchia spiraeae* Takah.

Related to *Patchia* Baker, but differs in the eyes not developed, the cauda elongate, and the dorsal stout setae arising from shallow conical tubercles. Also differs from *Chaitophorus* Koch in the eyes not or slightly protruding, the anal plate bilobed, the cauda elongate, the dorsal setae arising from shallow conical tubercles, etc. Resembles *Lizerius* Blanchard, but distinguished from it by the eyes with many facets, the absence of long dorsal tubercles, the cornicles developed, the cauda shorter, and the distal part of the last antennal segment longer than the base.

Parachaitophorus spiraeae Takah.

Patchia spiraeae, Takahashi, Aphididae of Formosa, III, p. 114 (1924).

(Wingless viviparous female.) Head without granules. Dorsal long bristles arising from shallow conical tubercles, arranged in transverse rows; each abdominal segment with about 6—8 bristles; front with a pair of them. Dorsum reticulated over the thorax

and abdomen except around the bases of bristles, dark and with granules on the last 2 abdominal segments and around the bases of bristles. Cauda constricted, setose, with a very long stout seta on each side. Basal tarsal segment with 3 setae; empodial setae thin, shorter than the claws. Rostrum stout, with many minute granules in longitudinal rows except on the distal 2 segments. Other characters were given in the original description.

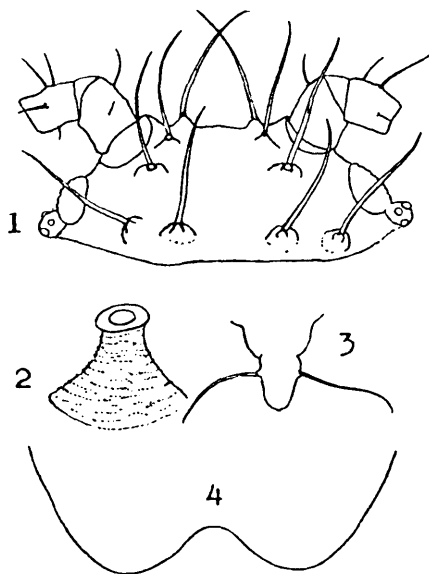


Fig. 1.

Parachaitophorus spiraeae Takah. (Wingless viviparous female.)

1. Head. 2. Cornicle. 3. Cauda. 4. Anal plate.

(Winged viviparous female.) Unknown, but some characters were observed through the skins of the grown nymphs. The 3rd—5th antennal segments with many circular sensoria scattered. Cornicles a little wider than long, expanded towards the base, constricted on the distal part, striate, with a flange at the apex.

Host. — *Spiraea cantoniensis* (Rosaceae).

Habitat. — Japan: Tadono, Wakayama-ken.

Phyllaphis fagifoliae Takah.

Trans. Sapporo Nat. Hist. Soc., Japan, VII, p. 194 and 200 (1919).

Phyllaphis fagi Monzen (nec. L.), Saito Ho-on Kai Monogr., I, p. 44 (1929).

This species is found on *Fagus* in Japan and Formosa, and is closely allied to *P. fagi* L., differing, however, in the following characters:

(Winged viviparous female.) Mesothorax always yellow, never dark; antennae mostly whitish, not blackish; abdomen without dark spots. Cauda white, with the knobbed part much wider than long. Legs white, hind tibiae slightly narrowed towards the apex. Body larger.

Greenidea psidii van der Goot.

Contrib. Fauna Indes Néerland., I, 3, p. 138 (1917).

Greenidea formosana Maki, Coll. Essays for Mr. Nawa, Gifu, Japan, p. 13 (1917); Takahashi, Aphididae of Formosa, VI, p. 29 (1931). (Syn. nov.)

Hosts. — *Psidium guyava*, *Rhodomyrtus tomentosa*, *Eugenia jambos*.

Some specimens were collected at Pusa, India, by C. K. Samuel, on *Psidium*, in February 1935. New to the fauna of India.

In Formosa this species is common on *Psidium* and *Rhodomyrtus*, and is sometimes found on *Eugenia jambos*. The wingless viviparous females on the last plant are green, and more sclerotized and yellowish brown on the dorsum of abdomen except on the marginal area. The cornicles are distinctly reticulated on the basal small part in the wingless form, one of the principal characteristics of the species. Other literature on this aphid was given in my paper above cited.

Toxoptera acori Theob.

Aphis acori Theobald, Bull. Soc. Roy. Ent. Egypte, 1922, p. 50 (Feb. 1922).

Toxoptera acori Hall, Minist. Agr. Egypt, Tech. Sc. Serv. Bull. 68, p. 34 (1926).

Toxoptera acori Shinji, Dobuts. Zasshi (Zool. Mag. Tokyo), XXXIV, p. 789 (Sept. 1922). (Syn. nov.)

Some specimens were taken on *Acorus calamus* at Naze, Amamioshima (Loochoo, Japan), by Y. Maki, July 13, 1932. Previously known from Egypt and Japan (Kyushu).

Rhopalosiphoninus sp.

An incomplete specimen of the apterous form was collected on an unknown plant, at Arisan, Formosa, April 1931, by S. Minowa, which is closely related to *R. latsiphon* Davidson, differing in the 3rd antennal segment a little shorter than the distal part of the 6th, and in lacking dusky markings on the abdomen, as well as in the tibiae dusky.

The genus *Rhopalosiphoninus* Baker has not been known from the Oriental Region.

Myzus siegesbeckicola Strand.

Myzus sp., Takahashi, Aphididae of Formosa, IV, p. 14 (1925).

Myzus siegesbeckicola Strand, Acta Univ. Latv., XX, p. 22 (1929); Takahashi, Aphididae of Formosa, VI, p. 70 (1931); van der Meer Mohr, Miscel. Zool. Sumatra., XCVI, p. 3 (1935).

(Wingless viviparous female.) Dorsum corrugated on the thorax and abdomen. Head roughly imbricated on both surface, with a few very small blunt setae. Frontal tubercles distinctly converging. Cornicles straight or a little curved, directed posteriorly. Cauda stout, conical, not constricted, rounded at the apex, much longer than wide, with 5 or 6 fine setae, the basal part as stout as the base of cornicle. Genital plate eminently produced posteriorly, conical, much wider than long, wider than the cauda, rounded apically, with a few small capitate setae. Legs slender, roughly imbricated except on the distal parts of tibiae; front and middle tarsi with 3 setae on the basal segment, but hind tarsi with 2 setae on the basal segment. Other characters were given in the previous papers (1925, 1931).

Host. — *Siegesbeckia orientalis*.

Habitats. — Formosa: Taihoku; Sumatra: Gg. Rinteh.

Many wingless females were collected in Sumatra by Prof. J. C. van der Meer Mohr, March 14, 1935.

The genital plate is produced posteriorly, and the species is not a typical form of the genus.

Amphorophora phyllanthi n. sp.

(Wingless viviparous female.) In specimens treated with caustic potash, head and pronotum a little sclerotized, meso- and metanota and each abdominal segment with a transverse sclerotized

area on the dorsum, which is provided with many transverse rows of minute spinules on the last 3 abdominal segments and is divided to some parts on the basal 5 segments; cornicles black; cauda pale; distal halves of antennae, distal parts of femora and tibiae, and tarsi dusky. Body oval, about twice as long as wide in mounted specimens, reticulated on the dorsum, with a few very small slightly capitate setae, and many transverse rows of minute spinules on the

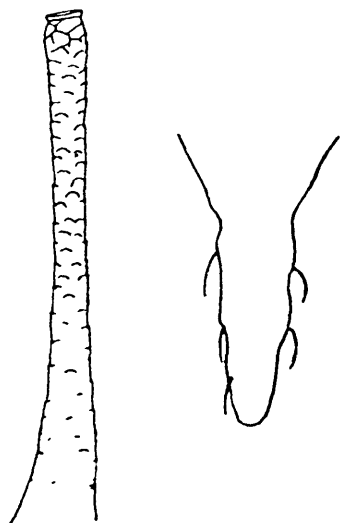


Fig. 2.

Amphorophora phyllanthi n. sp. (Wingless viviparous female.)
Cornicle and cauda.

venter. Head not imbricated, without granules and a median line, but with about 8 very small dorsal setae. Frontal tubercles very short, scarcely developed, very slightly convex on the mesal side. Front very slightly or scarcely convex at the middle. Eyes normal. Antennae very long, slender, with some very small setae, which are very slightly capitate and as long as those on the head; the 1st segment wider than long; the 2nd a little longer than wide, as long as the 1st, with a very small circular pore at the apex; the 3rd imbricated, with a small circular sensorium near the base; the 4th without sensoria; the relative length of segments about as follows: III — 95, IV — 61, V — 47, VI — 22 + 70. Rostrum stout, reaching beyond the middle coxae, the basal segment with many very small granules, the distal segment as long as the middle,

a little pointed apically, with 2 pairs of long setae on the distal part. Prothorax with a very small rounded tubercle on each side. Cornicles very long, slender, cylindrical, straight, slightly or scarcely swollen on the distal part, somewhat expanded on the basal part, broadest at the base, roughly imbricated, about twice as long as the cauda, as long as the 3rd antennal segment, not reaching the apex of cauda, with a few large reticulations at the apical part and a small apical flange; the reticulations sometimes indistinct. Cauda long, rather narrow, rounded apically, with 2 slight constrictions and 2 or 3 setae on the side, stouter than the cornicles. Legs very long, slender, with many short setae, which are very slightly capitate; coxae imbricated; trochanters defined from the femora; femora stouter than the cornicles, imbricated on the distal half; tibiae stouter than the 3rd antennal segment, with some longer stout setae on the distal half; tarsi imbricated, the basal segment with a median and 2 longer stiff setae, the distal segment with some stiff setae, which are much longer than the body setae; hind tarsi slightly longer than the basal part of the last antennal segment; empodial setae very long, very slightly capitate, slightly shorter than the claws. Anal plate short, broadly rounded, with some very long simple setae. Length of body — about 1.5 mm., antenna — about 1.48 mm., cornicle — about 0.44 mm., cauda — about 0.23 mm., hind femur — about 0.54 mm., hind tibia — about 0.99 mm.

(Winged viviparous female.) Head, thorax, antennae and cornicles black. Basal abdominal segments with a large dusky spot on the side and about 4 small dusky parts in a transverse row on the dorsum, the 7th and 8th tergites somewhat sclerotized. Wings hyaline, stigma pale. Dorsum not reticulated, with setae similar to those of the wingless form. Antennae with a few very small slightly capitate setae; the 3rd segment with 4—6 small or rather large circular sensoria arranged in a single row mostly on the basal half except on the basal part; the 4th without sensoria; the relative length of segments about as follows: III — 105, IV—68, V—60, VI—28 + 96. Cornicles as in the wingless form, but a little shorter than the 3rd antennal segment, about 1.8 times as long as the cauda, always with a few large reticulations on the tip. Cauda as in the wingless form. Fore wings imbricated, veins rather stout, media obsolete at the base, twice branched; hind wings with normal veins. Legs as in the wingless form. Length of body — about 1.7 mm., antenna — about 1.8 mm., cornicle — about

0.37 mm., cauda — about 0.21 mm., hind tibia — about 1.1 mm., fore wing — about 2.5 mm.

Host. — *Phyllanthus* sp.

Habitat. — Mauritius: Rose Hill.

Some specimens were taken by R. Mamet, January 4, 1935. Characterized by the very short frontal tubercles, the dorsum reticulated and with large sclerotized areas in the wingless form, and the very long slender cornicles slightly swollen at the tip and with a few large reticulations on the apex. This species resembles *Titanosiphon* Nevsky in the characters of cornicles, but differs remarkably from the known species of it. The cotype specimens are preserved in the collections of the collector and the author.

This aphid was included in a collection of these insects made on the island of Mauritius and sent me for identification by Mr. R. Mamet. Other species in the collection are those already described from Africa or other territories and will be listed by Mr. Mamet in his paper on the Aphididae of the island. Little attention has been paid to the aphid fauna of Mauritius and only a few species have been known as the pests of cultivated plants, and the present species is the first aphid to be recorded as indigenous to the island.